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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,229	04/13/2001	Lars Johansson	34467-00017	5877

38065 7590 02/08/2005

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EXAMINER	
FERGUSON, KEITH	
ART UNIT	**PAPER NUMBER**
2683	

DATE MAILED: 02/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/835,229	JOHANSSON ET AL.	
	Examiner	Art Unit	
	Keith T. Ferguson	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *29-53* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *29-53* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 April 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/31/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Fig 3, numbers 40,41,42,44,31,32,36 need labels. Fig. 4 numbers 40,41,42,44,56,61,62,58,59,60 need labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Objections

3. Claims 36 and 39 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 35 and 38. See MPEP § 608.01(n). Accordingly, the claims 36 and 39 not been further treated on the merits.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 29 and 31-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yegani et al. in view of Solondz.

Regarding claims 29,31,32,35,36,40,42,43,45,47,49,50, 52,53, Yegani et al. discloses a method (page 13, left column line 36 through page 15 line 8)/device (fig. 1 BS1,BS2)/node (MSC or radio network controller)(fig. 1) of controlling resources to avoid congestion in a cellular radio system having at least one mobile terminal connectable to a network via at least one base station (abstract and paragraphs 0006-009, paragraph 0019, paragraph 0024 and paragraph 0053), said method comprising the steps of: receiving in the base station, an uplink signal sent from the mobile terminal (paragraph 0024), said base station receiving a plurality of different uplink signals due to different uplink radio paths between the mobile terminal and the base station (col. 13, left column line 41-47); deriving from the plurality of uplink signals received at the base station, a resulting signal corresponding to the uplink signal sent from the mobile terminal (col. 13, left column line 41-58 and paragraphs 0024 through paragraph 0025); determining the importance of each received uplink signal to the resulting signal (paragraph 0025 through paragraph 0027 and paragraph

0036); determining whether there is a shortage or a projected shortage of resources to handle current or projected traffic demand in the base station (paragraph 0036); and if there is a shortage or a projected shortage of resources (paragraph 0036). Yegani et al. differs from claims 29,31,40 and 49 of the present invention in that it does not explicit disclose prioritizing downlink radio links from the base station to the mobile terminal according to the determined importance of each received uplink signal; and freeing resources from lower priority downlink radio links to avoid congestion. Solondz teaches a system for prioritizing downlink radio links from the base station to the mobile terminal according to emergency situations of each received uplink signal (col. 5 lines 10-24 and col. 8 lines 2-19); and dropping calls (freeing resources) from lower priority downlink radio links (col. 8 lines 2-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yegani et al. with prioritizing downlink radio links from the base station to the mobile terminal according to the determined importance of each received uplink signal; and freeing resources from lower priority downlink radio links to avoid congestion in order for the base station and MSC to provide resources to callers with the highest priority from callers with the least highest priority in case of emergency assistance needed from emergency personnel, as taught by Solondz.

Regarding claims 33,34 and 44, Yegani et al. discloses deriving a resulting signal and determining the importance of each received uplink signal to the resulting signal are performed in a MSC (node) connected to the base station (paragraph 0053), the MSC (node) informing the base station about the importance of each received uplink signal to the resulting signal (paragraph 0053).

Regarding claims 37,38,46 and 51, Yegani et al. discloses the MSC informs the base station which dialed digits (codes) utilized for downlink radio links are most important for a resulting signal in the mobile terminal (paragraph 0053), and wherein the step of prioritizing downlink radio links includes prioritizing the downlink radio links based on which codes utilized for downlink radio links are most important for the resulting signal in the mobile terminal (paragraph 0053).

Regarding claim 48, Yegani et al. discloses mobile communication network that controls network resources to avoid congestion while communicating with at least one mobile terminal (fig. 1 and fig. 2, abstract and paragraphs 0006-009, paragraph 0019, paragraph 0024 and paragraph 0053), said network comprising: a plurality of base stations (fig. 1 and fig. 2),

each of which includes means for receiving an uplink signal sent from the mobile terminal (abstract and paragraphs 0006-009, paragraph 0019, paragraph 0024 and paragraph 0053), wherein each base station receives a different uplink signal due to different uplink radio paths between the mobile terminal and each base station abstract and paragraphs 0006-009, paragraph 0019, paragraph 0024 and paragraph 0053); a MSC (node) connected to the plurality of base stations, (fig. 1 and fig. 2), means for deriving from the different uplink received at the plurality of base stations (col. 13, left column line 41-47), a resulting signal corresponding to the uplink signal sent from the mobile terminal (col. 13, left column line 41-58 and paragraphs 0024 through paragraph 0025); determining the importance of each received uplink signal to the resulting signal (paragraph 0025 through paragraph 0027 and paragraph 0036); determining whether there is a shortage or a projected shortage of resources to handle current or projected traffic demand in the base station (paragraph 0036); and if there is a shortage or a projected shortage of resources (paragraph 0036). Yegani et al. differs from claim 48 of the present invention in that it does not explicit disclose prioritizing downlink radio links from the base station to the mobile terminal according to the determined importance of each received uplink signal; and freeing resources from lower priority downlink radio links to avoid congestion. Solondz teaches a system for prioritizing downlink radio links from the base station to the mobile terminal according to emergency situations of each received uplink signal (col. 5 lines 10-24 and col. 8 lines 2-19); and dropping calls (freeing resources) from lower priority downlink radio links (col. 8 lines 2-19). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Yegani et al. with prioritizing downlink radio links from the base station to the mobile terminal according to the determined importance of each received uplink signal; and freeing resources from lower priority downlink radio links to avoid congestion in order for the network to provide resources to callers with the highest priority from callers with the least highest priority in case of emergency assistance needed from emergency personnel, as taught by Solondz.

6. Claims 30 and 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yegani et al. in view of Solondz as applied to claims 29 and 40 above in further view of Shurvinton.

Regarding claim 30 and 41, the combination of Yegani et al. and

Solondz differs froms claims 30 and 41 of the present invention in that they do not disclose reducing transmit power on the lower priority downlink radio links. Shurvinton teaches a reducing resource method wherein a data call with less priority is informed to reduce its transmission power 9paragraph 0047-0049 and paragraph 0055). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the combination of Yegani et al. and Solondz with reducing transmit power on the lower priority downlink radio links in order for the base station to provide a down link to the most prioritized handset based on the resources needed, as taught by Shurvinton.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Linneweh, Jr. et al. (U.S. Patent 5,862,485) discloses a method for allocating communication resources to support priority communications in a communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith T. Ferguson whose telephone number is (703) 305-4888. The examiner can normally be reached on 6:30am-5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (703) 308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Keith Ferguson
Art Unit 2683
January 31, 2004